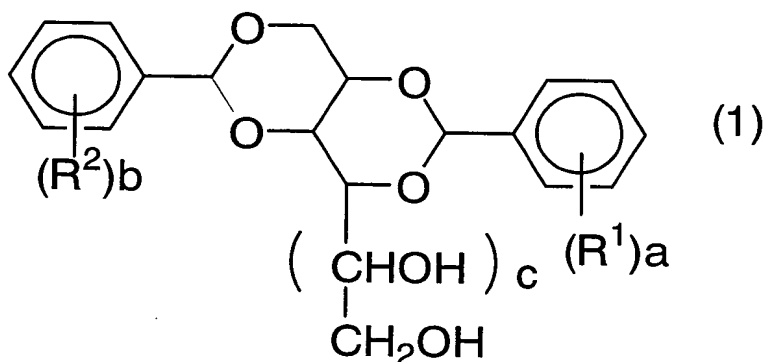


# CLAIMS

1. An agent for suppressing transfer of odor and taste originating from (A) a diacetal represented by the formula (1):



wherein  $R^1$  and  $R^2$  are the same or different and each represents a hydrogen atom, a  $C_1$  to  $C_4$  alkyl group, a  $C_1$  to  $C_4$  alkoxy group, a  $C_1$  to  $C_4$  alkoxycarbonyl group or a halogen atom; a and b each represents an integer of 1 to 5; c is 0 or 1; when a is 2, the two  $R^1$  groups taken together with the benzene ring to which they are linked may form a tetralin ring; and when b is 2, the two  $R^2$  groups taken together with the benzene ring to which they are linked may form a tetralin ring; the agent comprising component (B), i.e., at least one member selected from the group consisting of:

(B1)  $C_6$  to  $C_{32}$  saturated or unsaturated aliphatic

alcohols; and

(B2) C<sub>8</sub> to C<sub>32</sub> saturated or unsaturated aliphatic carboxylic acids having at least one hydroxyl group per molecule.

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2. The agent for suppressing transfer of odor and taste according to claim 1, wherein said at least one member selected from the group consisting of (B1) and (B2) is at least one member selected from the group consisting of 9-hydroxystearic acid, 10-hydroxystearic acid, 12-hydroxystearic acid, 9,10-dihydroxystearic acid, lauryl alcohol, myristyl alcohol, palmityl alcohol, stearyl alcohol and behenyl alcohol.

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3. A method for suppressing aldehyde generation by thermal decomposition of the diacetal represented by the formula (1) according to claim 1; the method comprising adding to the diacetal represented by the formula (1) at least one member selected from the group consisting of:

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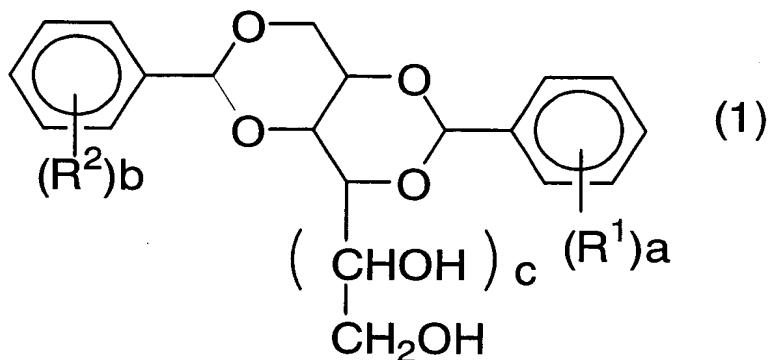
(B1) C<sub>6</sub> to C<sub>32</sub> saturated or unsaturated aliphatic alcohols; and

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(B2) C<sub>8</sub> to C<sub>32</sub> saturated or unsaturated aliphatic carboxylic acids having at least one hydroxyl group per molecule.

4. The method according to claim 3, wherein said at least one member selected from the group consisting of components (B1) and (B2) is at least one member selected from the group consisting of 9-hydroxystearic acid, 10-hydroxystearic acid, 12-hydroxystearic acid, 9,10-dihydroxystearic acid, lauryl alcohol, myristyl alcohol, palmityl alcohol, stearyl alcohol and behenyl alcohol.

5. An agent for suppressing transfer of odor and taste originating from (A) at least one diacetal represented by the formula (1):



wherein  $R^1$  and  $R^2$  are the same or different and each represents a hydrogen atom, a  $C_1$  to  $C_4$  alkyl group, a  $C_1$  to  $C_4$  alkoxy group, a  $C_1$  to  $C_4$  alkoxycarbonyl group or a halogen atom; a and b each represents an integer of 1 to 5; c is 0 or 1; when a is 2, the two  $R^1$  groups taken

together with the benzene ring to which they are linked may form a tetralin ring; and when b is 2, the two R<sup>2</sup> groups taken together with the benzene ring to which they are linked may form a tetralin ring;

5 the agent comprising components (B) and (C), wherein component (B) is at least one member selected from the group consisting of:

(B1) C<sub>6</sub> to C<sub>32</sub> saturated or unsaturated aliphatic alcohols; and

10 (B2) C<sub>8</sub> to C<sub>32</sub> saturated or unsaturated aliphatic carboxylic acids having at least one hydroxyl group per molecule, and

component (C) is

(C1) at least one anionic surfactant selected  
15 from the group consisting of C<sub>6</sub> to C<sub>30</sub> saturated or unsaturated aliphatic alcohol sulfuric ester salts, polyoxyethylene alkyl (C<sub>8</sub> to C<sub>22</sub>) or alkenyl (C<sub>8</sub> to C<sub>22</sub>) ether sulfuric ester salts in which the number of moles of ethylene oxide added is 1 to 8, polyoxyethylene alkyl (C<sub>8</sub>  
20 to C<sub>22</sub>) phenyl ether sulfuric ester salts in which the number of moles of ethylene oxide added is 1 to 10, sulfuric ester salts of polyhydric alcohol fatty acid partial esters formed from a C<sub>3</sub> to C<sub>6</sub> polyhydric alcohol and a C<sub>8</sub> to C<sub>22</sub> saturated or unsaturated fatty acid, and C<sub>8</sub>  
25 to C<sub>22</sub> saturated or unsaturated fatty acid monoalkanol (C<sub>2</sub>

to C<sub>6</sub>) amide sulfuric ester salts, wherein the sulfuric ester salts are lithium salts, sodium salts, potassium salts and ammonium salts;

(C2) at least one member selected from the group  
5 consisting of alkali metal salts of C<sub>8</sub> to C<sub>32</sub> saturated or unsaturated fatty acids which may have at least one hydroxyl group per molecule;

(C3) at least one aliphatic amine selected from the group consisting of dialkanolamine, trialkanolamine,  
10 and di(C<sub>8</sub> to C<sub>22</sub> alkyl or alkenyl) methylamine; or

(C4) a mixture of at least two of (C1), (C2) and (C3).

6. The agent for suppressing transfer of odor  
15 and taste according to claim 5, wherein

component (B) is at least one member selected from the group consisting of 9-hydroxystearic acid, 10-hydroxystearic acid, 12-hydroxystearic acid, 9,10-dihydroxystearic acid, lauryl alcohol, myristyl alcohol,  
20 palmityl alcohol, stearyl alcohol and behenyl alcohol, and

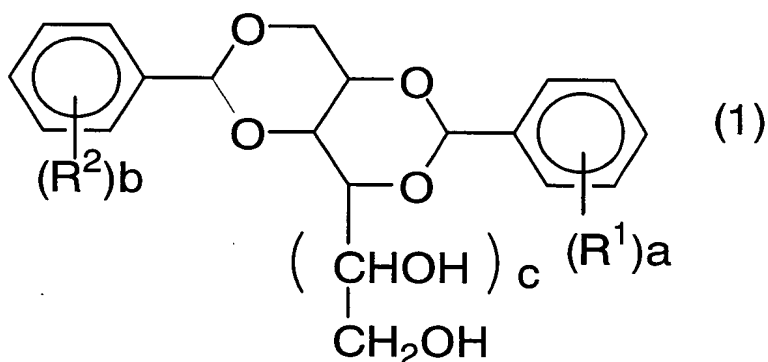
component (C) is (C2a) at least one member selected from the group consisting of lithium salts, sodium salts and potassium salts of C<sub>8</sub> to C<sub>32</sub> saturated or unsaturated fatty acids which may have at least one  
25 hydroxyl group per molecule, or

component (C) is (C1a) at least one sulfuric ester salt selected from the group consisting of lauryl sulfate salts, stearyl sulfate salts, oleyl sulfate salts, polyoxyethylene (the number of moles of ethylene oxide added = 2 to 3) lauryl ether sulfate salts, 5 polyoxyethylene (the number of moles of ethylene oxide added = 2 to 3) stearyl ether sulfate salts, polyoxyethylene (the number of moles of ethylene oxide added = 2 to 3) nonylphenyl ether sulfate salts, 10 polyoxyethylene (the number of moles of ethylene oxide added = 2 to 3) dodecylphenyl ether sulfate salts, glyceryl monolaurate sulfate salts, glyceryl monostearate sulfate salts, lauric acid monoethanolamide sulfuric ester salts, stearic acid monoethanolamide sulfuric ester salts, 15 and oleic acid monoethanolamide sulfuric ester salts, wherein the sulfuric ester salts or sulfate salts are lithium salts, sodium salts and potassium salts.

7. The agent for suppressing transfer of odor and taste according to claim 6, wherein component (C) is 20 at least one member selected from the group consisting of sodium lauryl sulfate, potassium lauryl sulfate, sodium stearate, potassium stearate, sodium 12-hydroxystearate and potassium 12-hydroxystearate.

8. The agent for suppressing transfer of odor and taste according to any one of claims 5-7, wherein the weight ratio of component (B) to component (C) is 1:0.2 to 5.

9. A method for suppressing aldehyde generation by thermal decomposition of (A) at least one diacetal represented by the formula (1):



wherein  $R^1$  and  $R^2$  are the same or different and each represents a hydrogen atom, a  $C_1$  to  $C_4$  alkyl group, a  $C_1$  to  $C_4$  alkoxy group, a  $C_1$  to  $C_4$  alkoxycarbonyl group or a halogen atom; a and b each represents an integer of 1 to 5; c is 0 or 1; when a is 2, the two  $R^1$  groups taken together with the benzene ring to which they are linked may form a tetralin ring; and when b is 2, the two  $R^2$  groups taken together with the benzene ring to which they are linked may form a tetralin ring;

the method comprising adding the following components (B) and (C) to the diacetal, wherein component (B) is at least one member selected from the group consisting of:

5           (B1) C<sub>6</sub> to C<sub>32</sub> saturated or unsaturated aliphatic alcohols; and

          (B2) C<sub>8</sub> to C<sub>32</sub> saturated or unsaturated aliphatic carboxylic acids having at least one hydroxyl group per molecule, and

10       component (C) is

          (C1) at least one anionic surfactant selected from the group consisting of C<sub>6</sub> to C<sub>30</sub> saturated or unsaturated aliphatic alcohol sulfuric ester salts, polyoxyethylene alkyl (C<sub>8</sub> to C<sub>22</sub>) or alkenyl (C<sub>8</sub> to C<sub>22</sub>) ether sulfuric ester salts in which the number of moles of ethylene oxide added is 1 to 8, polyoxyethylene alkyl (C<sub>8</sub> to C<sub>22</sub>) phenyl ether sulfuric ester salts in which the number of moles of ethylene oxide added is 1 to 10, sulfuric ester salts of polyhydric alcohol fatty acid partial esters formed from a C<sub>3</sub> to C<sub>6</sub> polyhydric alcohol and a C<sub>8</sub> to C<sub>22</sub> saturated or unsaturated fatty acid, and C<sub>8</sub> to C<sub>22</sub> saturated or unsaturated fatty acid monoalkanol (C<sub>2</sub> to C<sub>6</sub>) amide sulfuric ester salts, wherein the sulfuric ester salts are lithium salts, sodium salts, potassium salts and ammonium salts;

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(C2) at least one member selected from the group consisting of alkali metal salts of C<sub>8</sub> to C<sub>32</sub> saturated or unsaturated fatty acids which may have at least one hydroxyl group per molecule;

5 (C3) at least one aliphatic amine selected from the group consisting of dialkanolamine, trialkanolamine, and di(C<sub>8</sub> to C<sub>22</sub> alkyl or alkenyl) methylamine; or

(C4) a mixture of at least two of (C1), (C2) and (C3).

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10. The method according to claim 9, wherein component (B) is at least one member selected from the group consisting of 9-hydroxystearic acid, 10-hydroxystearic acid, 12-hydroxystearic acid, 9,10-dihydroxystearic acid, lauryl alcohol, myristyl alcohol, 15 palmityl alcohol, stearyl alcohol and behenyl alcohol, and

component (C) is (C2a) at least one member selected from the group consisting of lithium salts, sodium salts and potassium salts of C<sub>8</sub> to C<sub>32</sub> saturated or 20 unsaturated fatty acids which may have at least one hydroxyl group per molecule, or

component (C) is (C1a) at least one sulfuric ester salt selected from the group consisting of lauryl sulfate salts, stearyl sulfate salts, oleyl sulfate salts, 25 polyoxyethylene (the number of moles of ethylene oxide

added = 2 to 3) lauryl ether sulfate salts,  
polyoxyethylene (the number of moles of ethylene oxide  
added = 2 to 3) stearyl ether sulfate salts,  
polyoxyethylene (the number of moles of ethylene oxide  
5 added = 2 to 3) nonylphenyl ether sulfate salts,  
polyoxyethylene (the number of moles of ethylene oxide  
added = 2 to 3) dodecylphenyl ether sulfate salts,  
glyceryl monolaurate sulfate salts, glyceryl monostearate  
sulfate salts, lauric acid monoethanolamide sulfuric ester  
10 salts, stearic acid monoethanolamide sulfuric ester salts,  
and oleic acid monoethanolamide sulfuric ester salts,  
wherein the sulfuric ester salts or sulfate salts are  
lithium salts, sodium salts and potassium salts.

15 11. The method according to claim 10, wherein  
component (C) is at least one member selected from the  
group consisting of sodium lauryl sulfate, potassium  
lauryl sulfate, sodium stearate, potassium stearate,  
sodium 12-hydroxystearate and potassium 12-hydroxystearate.

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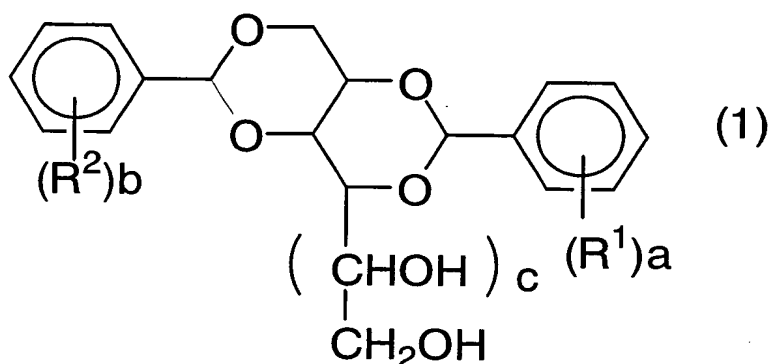
12. The method according to any one of claims  
9-11, wherein the weight ratio of component (B) to  
component (C) is 1:0.2 to 5.

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13. A granular or powdery diacetal composition

comprising:

(A) at least one diacetal represented by the formula (1)



wherein  $R^1$  and  $R^2$  are the same or different and each  
 5 represents a hydrogen atom, a  $C_1$  to  $C_4$  alkyl group, a  $C_1$  to  
 $C_4$  alkoxy group, a  $C_1$  to  $C_4$  alkoxycarbonyl group or a  
 halogen atom; a and b each represents an integer of 1 to  
 5; c is 0 or 1; when a is 2, the two  $R^1$  groups taken  
 together with the benzene ring to which they are linked  
 10 may form a tetralin ring; and when b is 2, the two  $R^2$   
 groups taken together with the benzene ring to which they  
 are linked may form a tetralin ring; and  
 component (B), i.e., at least one member selected from the  
 group consisting of

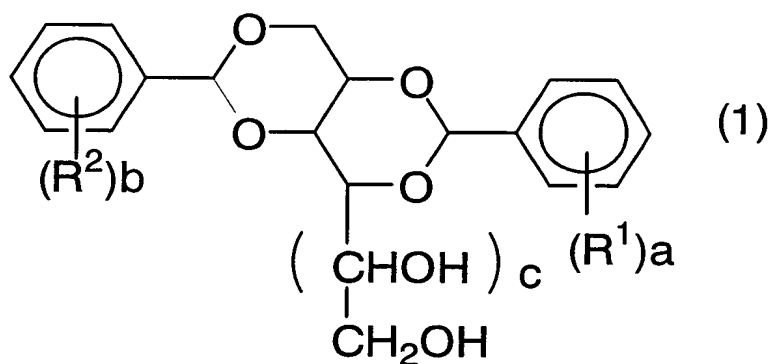
15 (B1)  $C_6$  to  $C_{32}$  saturated or unsaturated aliphatic  
 alcohols and

(B2)  $C_8$  to  $C_{32}$  saturated or unsaturated aliphatic  
 carboxylic acids having at least one hydroxyl group per  
 molecule,

wherein transfer of odor and taste originating from the diacetal is suppressed.

14. The diacetal composition according to claim 5 13, wherein component (B) is present in a proportion of 0.1 to 10 wt% based on the total amount of components (A) and (B).

15. A granular or powdery diacetal composition wherein transfer of odor and taste originating from the diacetal is suppressed;  
the composition comprising components (A), (B) and (C), wherein component (A) is at least one diacetal represented by the formula (1)



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wherein  $R^1$  and  $R^2$  are the same or different and each represents a hydrogen atom, a  $C_1$  to  $C_4$  alkyl group, a  $C_1$  to  $C_4$  alkoxy group, a  $C_1$  to  $C_4$  alkoxycarbonyl group or a

halogen atom; a and b each represents an integer of 1 to 5; c is 0 or 1; when a is 2, the two R<sup>1</sup> groups taken together with the benzene ring to which they are linked may form a tetralin ring; and when b is 2, the two R<sup>2</sup> groups taken together with the benzene ring to which they are linked may form a tetralin ring,

component (B) is at least one member selected from the group consisting of:

(B1) C<sub>6</sub> to C<sub>32</sub> saturated or unsaturated aliphatic alcohols; and

(B2) C<sub>8</sub> to C<sub>32</sub> saturated or unsaturated aliphatic carboxylic acids having at least one hydroxyl group per molecule, and

component (C) is

(C1) at least one anionic surfactant selected from the group consisting of C<sub>6</sub> to C<sub>30</sub> saturated or unsaturated aliphatic alcohol sulfuric ester salts, polyoxyethylene alkyl (C<sub>8</sub> to C<sub>22</sub>) or alkenyl (C<sub>8</sub> to C<sub>22</sub>) ether sulfuric ester salts in which the number of moles of ethylene oxide added is 1 to 8, polyoxyethylene alkyl (C<sub>8</sub> to C<sub>22</sub>) phenyl ether sulfuric ester salts in which the number of moles of ethylene oxide added is 1 to 10, sulfuric ester salts of polyhydric alcohol fatty acid partial esters formed from a C<sub>3</sub> to C<sub>6</sub> polyhydric alcohol and a C<sub>8</sub> to C<sub>22</sub> saturated or unsaturated fatty acid, and C<sub>8</sub>

to C<sub>22</sub> saturated or unsaturated fatty acid monoalkanol (C<sub>2</sub> to C<sub>6</sub>) amide sulfuric ester salts, wherein the sulfuric ester salts are lithium salts, sodium salts, potassium salts and ammonium salts;

5           (C2) at least one member selected from the group consisting of alkali metal salts of C<sub>8</sub> to C<sub>32</sub> saturated or unsaturated fatty acids which may have at least one hydroxyl group per molecule;

10           (C3) at least one aliphatic amine selected from the group consisting of dialkanolamine, trialkanolamine, and di(C<sub>8</sub> to C<sub>22</sub> alkyl or alkenyl) methylamine; or

          (C4) a mixture of at least two of (C1), (C2) and (C3).

15           16. The diacetal composition according to claim 15, wherein based on the total amount of components (A), (B) and (C), component (B) is present in a proportion of 0.1 to 5 wt% and component (C) is present in a proportion of 0.1 to 5 wt%.

20           17. The diacetal composition according to claim 16, wherein the weight ratio of component (B) to component (C) is 1:0.2 to 5.

25           18. A polyolefin resin nucleating agent

comprising the diacetal composition according to any one of claims 13 to 17, wherein transfer of odor and taste originating from the diacetal is suppressed.

5           19. A polyolefin resin composition comprising the polyolefin resin nucleating agent according to claim 18 and a polyolefin resin, wherein transfer of odor and taste originating from the diacetal is suppressed.

10           20. The polyolefin resin composition according to claim 19, wherein the polyolefin resin nucleating agent according to claim 18 is present in an amount of 0.05 to 3 weight parts per 100 weight parts of the polyolefin resin.

15           21. A polyolefin resin molded product prepared by molding the polyolefin resin composition according to claim 19 or 20, wherein transfer of odor and taste originating from the diacetal is suppressed.

20           22. A container or a packaging material for foods, cosmetics or medicines comprising the polyolefin resin molded product according to claim 21, wherein transfer of odor and taste originating from the diacetal is suppressed.

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23. A method for suppressing odor originating from a diacetal at the time of molding a polyolefin resin, comprising mixing the nucleating agent according to claim 18 with a polyolefin resin and molding a resultant resin composition.

24. A method for suppressing transfer of odor and taste originating from a diacetal to a content (such as foods, cosmetics and medicines), characterized in that it comprises placing the content in a packaging material or a container prepared by mixing the nucleating agent according to claim 18 with a polyolefin resin and molding a resultant resin composition.